STORM WATER MANAGEMENT PLAN (SWMP) REQUIREMENTS CHECKLIST E-35

Development Services
Land Development Engineering
1635 Faraday Avenue
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www.carlsbadca.gov

Storm Water Management Plan

- ❑ I. Project Setting
  - ❑ A. Project Name, Location, Description, Vicinity Map
  - ❑ B. Existing site features and conditions
  - ❑ C. Proposed land use and anticipated activities that would affect stormwater
  - ❑ D. Opportunities and constraints for stormwater control and treatment
  - ❑ E. Nearby water bodies, existing storm drain systems
- ❑ II. Applicable Stormwater Standards
  - ❑ A. Completed Storm Water Standards Questionnaire (SWSQ)
  - ❑ B. HMP Applicability Determination using expanded narrative from SUSMP
    - ❑ 1) HMP exemption, if any, with backup justification
- ❑ III. Identify Pollutants-of-Concern
  - ❑ A. Identify pollutants associated with type of project/use
  - ❑ B. Identify watershed and hydrologic unit basin number and receiving waters project contributes to
  - ❑ C. List impaired water bodies per 303d listing (latest) that project contributes to
  - ❑ D. Beneficial uses of receiving water
  - ❑ E. Summarize primary pollutants-of-concern
- ❑ IV. Source Control Measures
  - ❑ A. Description of site activities and potential sources of pollutants
  - ❑ B. Complete table showing sources, permanent source controls, and operational source controls
- ❑ V. Low Impact Development (LID) Design Strategies, *see section 4 of SUSMP*
  - ❑ A. Optimization of site layout
    1) Limitation of development envelope
    2) Preservation of natural drainage features
    3) Setbacks of creeks, wetlands, and riparian habitats
    4) Minimization of imperviousness
    5) Using drainage as design element
  - ❑ B. Layout and use of permeable pavements or other pervious surfaces
  - ❑ C. Dispersal of runoff from impervious areas to pervious areas
- ❑ VI. Integrated Management Practices (IMP's), if applicable (not required if choosing TCBMP and/or hydromodification sizing approach below)
  - ❑ A. Selection process for IMP's targeting pollutants-of-concern for project.
  - ❑ B. Sizing factors for IMP's
    - ❑ 1) Lower flow threshold determination
      - a) SCCWRP analysis, if chosen
    - ❑ 2) HMP Decision Matrix
  - ❑ C. Geotechnical recommendation on soil infiltration rates (if IMP facilities to drain through native soil)
  - ❑ D. Infiltration calculations (drawdown time) for any self-retaining areas serving as an IMP
- ❑ VII. Treatment Control BMP's (TCBMP's), if applicable (not required if choosing IMP sizing approach)
  - ❑ A. Selection process for TCBMP's to target the pollutants-of-concern for your project. Use TCBMP's that are the most efficient at removing the target pollutants. Consider treatment trains. Include narrative on selection criteria for each available TCBMP for this project and why the other TCBMP's were not chosen
  - ❑ B. Sizing factors for TCBMP's using LID procedure, or describe numeric sizing criteria approach (flow-based or volume based)
  - ❑ C. Geotechnical recommendation on soil infiltration rates (if TCBMP facilities to drain through native soil)

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- ❑ VIII. Hydromodification, if applicable (not required if choosing IMP sizing approach)
  - ❑ A. Lower flow threshold determination
    - ❑ 1) SCCWRP analysis, if chosen
    - ❑ 2) HMP Decision Matrix
  - ❑ B. Continuous simulation model, subject to city approval (see final HMP for analysis guidelines), or
  - ❑ C. Print-outs of pond sizing criteria and results using BMP sizing calculator
  - ❑ D. Tabulation of Flow-control facility sizes and design criteria
- ❑ IX. Documentation of Stormwater Water Design (for IMP or TCBMP approach)
  - ❑ A. Hydrology maps showing tributary areas to each TCBMP or DMA's to IMP's
  - ❑ B. Print-outs from BMP sizing calculator, if used
  - ❑ C. Tabulation (depending on applicable stormwater standards)
    - ❑ 1) Drainage Management Areas (DMA's)
    - ❑ 2) Tabulation of DMA areas (SF)
    - ❑ 3) DMA descriptions (e.g.: pavement, roof, self-treating, etc)
    - ❑ 4) Listing all IMP, TCBMP's, or flow control facilities serving each DMA
    - ❑ 5) Sizing Calculations
- ❑ X. BMP Facility Maintenance Requirements
  - ❑ A. Describe ownership and responsibility of maintenance of BMP's in perpetuity
    - 1) Describe commitments to execute any necessary agreements
    - 2) Statement accepting responsibility for operation and maintenance of facilities until that responsibility is formally transferred
  - ❑ B. Summary of maintenance requirements for each stormwater facility
- ❑ XI. SWMP Certification Statements
  - ❑ A. Preparer's statement
  - ❑ B. Owner's statement

Attachments:
Copy of completed Storm Water Standards Questionnaire (SWSQ)
Single sheet post-construction BMP exhibit
DMA/IMP sizing exhibit (for integrated LID-IMP approach)
DMA/TCBMP sizing exhibit (for alternative to LID approach)
Proprietary BMP product information and independent 3rd party studies on pollutant removal efficiency

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Single sheet Post-Construction BMP Exhibit Requirements

- ❑ Use City standard single sheet post-construction BMP template (see city website)
- ❑ Show entire property included on one map (use key map if multi-sheets)
- ❑ Show drainage areas/direction of flows
- ❑ Show property lines and streets/driveways
- ❑ Show and callout private and public storm drain systems
- ❑ Show nearby water bodies or natural channels
- ❑ Show location of all inlets and outlets of storm drain system
- ❑ Show and callout location of proposed post construction stormwater controls and BMP's, including detention basins
- ❑ Show locations of impervious and pervious areas (use distinguishable symbols)
- ❑ Show location where materials would be exposed to stormwater
- ❑ Show areas of potential erosion
- ❑ Show location of building and activity areas (e.g. fueling islands, garages, waste container area, wash racks, hazardous material storage areas, etc.)
- ❑ Show and callout all site design and Source Control BMP's, (e.g. disconnecting runoff, stenciling of inlets, trash storage areas, material storage areas, efficient irrigation/landscape design, etc.)
- ❑ Show all TCBMP's, IMP, or flow-control facilities detailed and called out on the plan sheet
- ❑ Delineated areas draining to each TCBMP, IMP, or flow-control facility
- ❑ Signature Block for City Engineer
- ❑ Inspection Signature Blocks for Building, Landscape and Engineering Inspectors